

INTERNATIONAL SEARCH REPORT

Int'l Application No
PCT/GB 03/05621

| A. CLASSIFICATION OF SUBJECT MATTER | | | | | |
|-------------------------------------|------------|-----------|------------|-----------|-----------|
| IPC 7 | C07K14/54 | C12N15/24 | C12N5/10 | C12Q1/68 | A61K38/20 |
| | C07K16/24 | G01N33/68 | A61K39/395 | A61K48/00 | G01N33/50 |
| | A01K67/027 | | | | |

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 C07K C12N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, BIOSIS, EMBL, MEDLINE, SEQUENCE SEARCH

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|----------|--|-------------------------------|
| X | WO 02/070706 A (SCHMIDT KERSTIN N ; VANDLEN RICHARD L (US); WILLIAMS P MICKEY (US)); 12 September 2002 (2002-09-12) p. 2:17-11:29, 26:14-32, 52:22-66:21, 69:29-72:20, 73:1-76:36, 83:31-90:4, example 1,8,10,12, claims ---- | 1-3,6,8, 9,12-15, 19-45 |
| Y | GANGUR VENU ET AL: "Chemokines in health and disease" VETERINARY IMMUNOLOGY AND IMMUNOPATHOLOGY, vol. 86, no. 3-4, July 2002 (2002-07), pages 127-136, XP002279693 ISSN: 0165-2427 p. 127-129, table 1,2 ---- | 1-15, 19-45 -/- |

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

* Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the International filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the International filing date but later than the priority date claimed

- *T* later document published after the International filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed Invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed Invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- *&* document member of the same patent family

| | |
|--|--|
| Date of the actual completion of the International search | Date of mailing of the International search report |
| 12 May 2004 | 04/06/2004 |
| Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016 | Authorized officer Puonti-Kaerlas, J |

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Inte onal Application No
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| C(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT | | |
|---|---|-----------------------|
| Category | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
| Y | BAGGIOLINI M: "CHEMOKINES IN PATHOLOGY AND MEDICINE" JOURNAL OF INTERNAL MEDICINE, OXFORD, GB, vol. 250, no. 2, August 2001 (2001-08), pages 91-104, XP001021499 ISSN: 0954-6820 p. 91-93, 95, 97-99 ----- | 1-15, 19-45 |
| X | KAISER PETE ET AL: "The chicken 9E3/CEF4 CXC chemokine is the avian orthologue of IL8 and maps to chicken Chromosome 4 syntenic with genes flanking the mammalian chemokine cluster" IMMUNOGENETICS, vol. 49, no. 7-8, July 1999 (1999-07), pages 673-684, XP002279694 ISSN: 0093-7711 p. 673-675, figure 5 ----- | 1-4 |
| Y | NEYROUD NATHALIE ET AL: "Genomic organization of the KCNQ1 KI+ channel gene and identification of C-terminal mutations in the long-QT syndrome" CIRCULATION RESEARCH, vol. 84, no. 3, 19 February 1999 (1999-02-19), pages 290-297, XP002279695 ISSN: 0009-7330 p. 291 -& DATABASE EMBL 'Online! retrieved from EBI Database accession no. AJ006345 XP002279696 sequence ----- | 5-15, 19-45 |
| X | | 8-13 |

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. Claims: 1 (complete), 2-45 (partially)

A polypeptide comprising the amino acid sequence of SEQ ID No:10 and subject-matter related thereto.

2. Claims: 2-45 (partially)

A polypeptide comprising the amino acid sequence of SEQ ID No:12 and subject-matter related thereto.

3. Claims: 4-45 (partially)

A polypeptide comprising the amino acid sequence of SEQ ID No:2 and subject-matter related thereto.

4. Claims: 4-45 (partially)

A polypeptide comprising the amino acid sequence of SEQ ID No:4 and subject-matter related thereto.

5. Claims: 4-45 (partially)

A polypeptide comprising the amino acid sequence of SEQ ID No:6 and subject-matter related thereto.

6. Claims: 4-45 (partially)

A polypeptide comprising the amino acid sequence of SEQ ID No:8 and subject-matter related thereto.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box I.2

Claims Nos.: 16-18

Present claims 16-18 relate to a compound defined by reference to a desirable characteristic or property, namely being able to increase or decrease the expression level of the polypeptide of claims 1-7.

The claims cover all compounds having this characteristic or property, whereas the application provides no support within the meaning of Article 6 PCT nor disclosure within the meaning of Article 5 PCT for such compounds. In the present case, the claims so lack support, and the application so lacks disclosure, that a meaningful search over the whole of the claimed scope is impossible. Independent of the above reasoning, the claims also lack clarity (Article 6 PCT). An attempt is made to define the compound by reference to a result to be achieved. Again, this lack of clarity in the present case is such as to render a meaningful search over the whole of the claimed scope impossible. Consequently, said claims have not been searched.

The applicant's attention is drawn to the fact that claims, or parts of claims, relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure.

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Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:
Although claims 20, 22-29 and 35-38 are directed to a diagnostic method / method of treatment practised on the human / animal body, the search has been carried out and based on the alleged effects of the compound/composition.
2. Claims Nos. 16-18 because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
see FURTHER INFORMATION sheet PCT/ISA/210
3. Claims Nos. because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple Inventions in this International application, as follows:

see additional sheet

1. As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

The additional search fees were accompanied by the applicant's protest.
 No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

Inte
onal Application No
PCT/GB 03/05621

| Patent document cited in search report | Publication date | Patent family member(s) | Publication date |
|--|------------------|-------------------------|------------------|
| WO 02070706 | A 12-09-2002 | AU 1661002 A | 02-04-2002 |
| | | AU 6531101 A | 17-12-2001 |
| | | AU 6802801 A | 24-09-2001 |
| | | AU 7011801 A | 04-03-2002 |
| | | AU 7197301 A | 05-02-2002 |
| | | AU 7315001 A | 30-01-2002 |
| | | AU 8490601 A | 04-03-2002 |
| | | AU 8678501 A | 04-03-2002 |
| | | CA 2401448 A1 | 20-09-2001 |
| | | CA 2410162 A1 | 13-12-2001 |
| | | CA 2412211 A1 | 03-01-2002 |
| | | CA 2416456 A1 | 31-01-2002 |
| | | CA 2416538 A1 | 31-01-2002 |
| | | CA 2420140 A1 | 28-02-2002 |
| | | CA 2420176 A1 | 28-02-2002 |
| | | CA 2420193 A1 | 28-02-2002 |
| | | CA 2421056 A1 | 28-03-2002 |
| | | CA 2439594 A1 | 12-09-2002 |
| | | EP 1286749 A1 | 05-03-2003 |
| | | EP 1259614 A2 | 27-11-2002 |
| | | EP 1311674 A2 | 21-05-2003 |
| | | EP 1309685 A2 | 14-05-2003 |
| | | EP 1309620 A2 | 14-05-2003 |
| | | EP 1311662 A2 | 21-05-2003 |
| | | EP 1311668 A2 | 21-05-2003 |
| | | EP 1341814 A2 | 10-09-2003 |
| | | EP 1366161 A2 | 03-12-2003 |
| | | JP 2004508805 T | 25-03-2004 |
| | | JP 2004506413 T | 04-03-2004 |
| | | US 2002182673 A1 | 05-12-2002 |
| | | US 2002192209 A1 | 19-12-2002 |
| | | US 2003032057 A1 | 13-02-2003 |
| | | US 2003148373 A1 | 07-08-2003 |
| | | US 2003130490 A1 | 10-07-2003 |
| | | US 2003114652 A1 | 19-06-2003 |
| | | US 2003082626 A1 | 01-05-2003 |
| | | US 2003082627 A1 | 01-05-2003 |
| | | US 2003148375 A1 | 07-08-2003 |
| | | US 2003153000 A1 | 14-08-2003 |
| | | US 2003064062 A1 | 03-04-2003 |
| | | US 2003220471 A1 | 27-11-2003 |
| | | US 2003113793 A1 | 19-06-2003 |
| | | US 2003054406 A1 | 20-03-2003 |
| | | US 2003044841 A1 | 06-03-2003 |
| | | US 2002119130 A1 | 29-08-2002 |
| | | US 2003092061 A1 | 15-05-2003 |
| | | US 2003198993 A1 | 23-10-2003 |
| | | WO 0193983 A1 | 13-12-2001 |
| | | WO 0200690 A2 | 03-01-2002 |
| | | WO 0216429 A2 | 28-02-2002 |